

### **REMARKS**

These remarks are responsive to the Non-Final Office Action mailed on April 28, 2009, ("the Office Action"). The Applicant thanks the Examiner for a careful and thorough examination of the above-referenced Application, as well as the indication of allowable subject matter.

On September 8, 2009, Applicant conducted an Examiner interview with Examiner Matzek regarding the proposed amendments provided in this Response. Applicant thanks the Examiner for the Interview Summary mailed on September 18, 2009. Applicant provides remarks herein pertaining to that Interview and Summary.

### **Status of the Claims**

At the time of the Office Action, Claims 22-29 and 33-44 were pending, with no claims being allowed, Claims 22-29 and 33-44 being rejected, and no claims being objected to. Claims 22, 29 and 33 are amended herein. Support for these amendments may be found throughout the Specification. No new matter is being submitted.

### **35 U.S.C. § 103 Rejections**

The Examiner has rejected Claims 22-27, 33, 34, 36 and 38-44 under 35 U.S.C. §103(a) as being unpatentable over Healey (WO 01/32292 A1) in view of Pall (U.S. 4,302,688). Applicant has amended independent Claims 22, 29 and 33 rendering this ground of rejection moot.

Applicant has amended the independent claims to require that the first layer mat portion and the second layer mat portion be formed on first and second drum collectors, the layered mat portions being collected from the drum collectors in a direction which is

generally perpendicular to a rotational axis, or tangent to the surfaces, of the drum collectors. Support and basis for the amendments provided herein may be found in at least Figure 1, Figure 5, Figure 7, Figure 9 and Figure 11 wherein the mat portion exits each drum collector in a direction which is generally perpendicular to the rotational axis of a drum collector toward roller (13) as discussed with the Examiner.

Contrary to the Applicant's amendments, Figure 4 of the Healey reference and the descriptions provided therewith, depict that the media mat described therein is formed on a collector belt or a vacuum conveyor table generally shown around element (110) in Figure 4. Thus, Healey fails to teach or describe a single drum collector or multiple drum collectors.

Further contrary to the amendments, Pall fails to teach or suggest the amended limitations. As shown in Pall Figures 1 and 6, the mandrel is cylindrical and tapered so that the filter media is removed from the mandrel in either of a conical or cylindrical form. **The filter material is collected in a direction which is substantially parallel to the rotational axis of the mandrel (32).** Thus, the filter material is not collected in the direction currently claimed by the Applicant.

Beyond these differences, Pall also fails to teach or suggest each of the mat layers being formed on separate collectors, respectively. Pall fails to teach multiple collectors because the media is collected in a cylindrical form and cannot pass through a second collector. It is noted, for example in the abstract, that the material formed is of a round cylindrical shape. Due to this cylindrical shape, second or subsequent layers of media cannot be disposed on the initial layer. Thus, the material is not in a mat form and cannot

be layered, as claimed. Thus the prior art fails to provide all of the currently pending claim limitations.

For the above reasons, Applicant asserts and the Examiner agreed during the interview that the amended limitations are not taught by the prior art.

During the interview, the Examiner expressed some concern regarding the functional nature of the claim limitations with respect to the structural claims currently pending. To overcome this concern, the Examiner requested information as to why a new limitation would lead to a materially different product. Applicant responded stating the proposed combination would be materially different because the claimed structure would not be able to be formed by the Examiner's proposed combination.

Pall requires that the media be collected from the mandrel in a direction which is parallel to the axial direction of the mandrel. In order to form the cylindrical or conical shape required by Pall, the material must be removed from the mandrel in this axial direction. However, Applicant has now claimed that the media must be collected in a direction which is generally perpendicular to the axis of the collector or generally tangent to the collector. With the claimed collection in such a manner, the filter media may not be formed since Pall cannot be utilized to form layers. Instead, the media is formed in a cylindrical shape. In order for further processing, the cylindrical shape required by Pall must be destroyed in order to achieve the claimed invention. Accordingly, the Pall teachings would result in a materially different product from that which is claimed by the Applicant.

Additionally, the Examiner is reminded that Healey also fails to teach the multiple collector formation for each of the layers but instead utilizes a flat table or vacuum

conveyor. This single table could not be combined with the mandrel of Pall since the Pall method results in a cylindrically shaped media, not a flat media as required by Healey and Applicant's claimed invention.

As a practical matter, by collecting material from the collector in the axial direction described by Pall, a shear force is imparted on the material as it is removed from the mandrel. This is potentially damaging to the filter media and a further reason why the Applicant has chosen to form the mat structure in a manner different than that described by Pall. In the existing embodiments, the Applicant's filter media is collected in a direction which is generally perpendicular to the collector axis or tangent to the collector surface. Such collection reduces the shear stress on the filter media during the collection process.

Additionally, since Applicant now requires that each of the layers now be formed with a separate drum collector, Applicant asserts that such design could not be formed by the proposed combination. The Healey reference describes a single conveyor table. To the contrary, Pall teaches a single mandrel which forms a cylindrical shaped media and which is subsequently flattened. The Pall reference fails to teach or suggest multiple mandrels used with a dye in order to form multiple layers of filter media. Additionally, Applicant asserts that such construction could not be formed since the mandrel structure of the Pall reference results in a cylindrically shaped filter media, rather than a flat media as would be required to continue such processing.

During the interview, Applicant also discussed the recent Federal Circuit decision distinguishing the combination of structural limitations and related function as opposed to functional limitations alone. Applicant cited the Federal Circuit decision *Gemtron v.*

*Saint Gobain*, 572 F.3D 1371, (Fed Cir. 2009), which describes the fact that functional or process type limitations in a structural claim do not necessarily change the claim to a product bi-process claim. Additionally, Applicant further extrapolates from that decision that functional or process-type limitations within a structure claim can provide patentable weight as opposed to mere functional limitations alone which, as the Examiner indicated during the interview, do not provide patentable weight alone.

3M Innovative Props. Co. v. Avery Dennison Corp., 350 F.3d 1365, 1371 (Fed. Cir. 2003) (“[E]ven words of limitation that can connote with equal force a structural characteristic of the product or a process of manufacture are commonly and by default interpreted in their structural sense ....”); ...see also Gamero, 412 F.2d at 279 (noting that past-tense verbs such as “‘intermixed,’ ‘ground in place,’ ‘press fitted,’ ‘etched,’ and ‘welded,’ all ... at one time or another have been separately held capable of construction as structural, rather than process, limitations.”); Eric P. Mirabel, Product-By-Process Claims: A Practical Perspective, 68 J. Pat. & Trademark Off. Soc’y 3, 4-7 (1986). **Defining a structural component by its functional as well as its physical characteristics is different from defining a structure solely by the process by which it is made.** (emphasis added)

Accordingly, Applicant asserts that the amended functional limitations provided herein, in combination with structural limitations which are related to such function, should be accorded patentable weight, as opposed to functional limitations alone.

Applicant has amended the claims functionally to require a direction in which the media is collected from each collector source. Applicant has attempted to draw a nexus between the each of the first and second layered mat portions (structure) with the formation by first and second drum collectors (function) and thereby connect the claimed structure with the function or process of forming these structures. Applicant has amended Claim 22 to require, “*each of* said first layered mat portion and said second mat layered portion being formed on first and second drum collectors *respectively*, said

layered mat portions being collected from said drum collectors in a direction which is generally perpendicular to a rotational axis of said drum collectors....” (emphasis added). Similarly, in Claim 29, Applicant now claims that “said first layered mat portion and said second layered mat portion formed on first and second said collector sources *respectively*, each of said first and second collector sources having a rotational axis, *wherein said first and second mat portions are collected from said first and second collector sources.*” (emphasis added). Applicant now claims that the mat portions are collected from first and second sources, not a single mandrel and not a single vacuum conveyor table. Similar amendments are made in the final independent claim. Additionally, Applicant includes limitations for the direction of collection which are also not shown and could not be used with the prior art devices to provide the claimed invention.

For at least the reasons set forth herein, the Applicant respectfully submits that the cited references fail to render obvious Claims 25, 40, 43. Thus, the Applicant respectfully requests that this ground of rejection be withdrawn.

### **Conclusion**

The Applicant respectfully submits that the instant application is in condition for allowance. Reconsideration and notice of allowance are respectfully requested. If the Examiner believes that prosecution might be advanced by discussing the application with the Applicant’s counsel, in person or over the telephone, the Applicant’s counsel would welcome the opportunity to do so.

Respectfully submitted,

**MIDDLETON REUTLINGER**

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